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# **Grade Level Guide for Instructional Work**

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# Grade Level Guide for Instructional Work

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This classification guide provides general criteria for determining the grade level of non-supervisory instructor and instructional specialist work. This work is performed in a wide range of education and training programs operated by Federal agencies.

This guide supersedes the Grade-Evaluation Guide for Instructor and Specialist Positions Involving Education and Training Work (TS-40, February 1980), the Instructor Grade Evaluation Guide (TS-66, October 1982), and the Instructional Specialist Grade Evaluation Guide (TS-66, October 1982).

## **COVERAGE**

Grade level criteria are divided into two parts: Part I for instructor work and Part II for instructional specialist work.

Part I covers instructor work involving the following types of activities:

- Preparing daily work plans based on general course outlines and established learning objectives. Plans cover instructional methods and techniques, training materials and aids, time schedules, etc.
- Training in traditional classroom situations or in self-spaced learning programs where the instructor guides students in the use of special learning techniques.
- Evaluating the progress of students and advising and assisting them to improve their performance.

Some instructors develop their own courses; this is typical of college-level instructors who also contribute to literature in their field and may be involved in original research.

Part II covers instructional specialist work such as the following:

- Ascertaining needs for training and education, usually through surveys or job analysis.
- Determining the objectives and scope of courses, the subject to be covered, and the criteria for evaluation.
- Developing, revising, or adapting courses and instructional materials and guides.
- Evaluating education and training programs and recommending needed changes and improvements.

Instructional specialist work may include emphasis on such areas as curriculum development, course resources (e.g., facilities, audiovisual aids, and other training devices), computer assisted or programmed instruction, and educational tests and measurement. Persons performing instructional specialist work may provide assistance to instructors on both resource and instructional matters.

This guide takes into account the mixed nature of positions involving education and training work that are classified in subject-matter series. However, some positions, because of their particular subject-matter knowledge requirements, may not be adequately evaluated by the criteria provided in this guide alone. In these positions, the instructional aspects of the work are evaluated by use of this guide; the subject-matter aspects by use of appropriate standards for the subject-matter series. General classification principles appropriate in the treatment of "mixed" positions are then applied in determining the grade level of the position.

The General Schedule Supervisory Guide is to be used for those supervisory positions which are not excluded from that guide's coverage.

Further, the guide does provide evaluation criteria for:

- Education and training work that is classified in subject-matter series when published standards for such series contain specific criteria for evaluating the work.
- Work which primarily involves managerial responsibility for planning, developing, directing, and conducting operating education and training programs, or work which primarily involves service as a guidance counselor to students in these programs.
- Work for which the paramount requirement is an intensive knowledge of Federal-State interrelationships in promoting, coordinating, and improving education policies and activities nationwide.
- Work which requires paramount knowledge of a trade, craft, or laboring occupation.
- Research. (Research functions found in some positions are not discussed in detail by this guide. Information and evaluation criteria concerning research functions are available in standards for certain subject-matter series and grade evaluation guides.)
- Work which involves education and rehabilitation therapy and other work directed toward therapeutic objectives, such as that which concerns the imparting of nonacademic skills to handicapped persons to diminish their emotional stress, provide them with a sense of achievement, and improve their abilities to cope with their environment.

## HOW TO USE THIS GUIDE

This guide provides general grade level criteria for instructor work from GS-5 through GS-13 and for instructional specialist work from GS-5 through GS-14. This does not preclude agencies from classifying work above these grade levels based on extension of the criteria in this guide or use of other applicable standards or guides. Work at these higher levels is highly individualized and therefore not appropriately covered by general criteria describing typical duties and responsibilities.

The criteria are developed around two broad classification factors:

- (1) Nature of Assignment. This factor encompasses such aspects as the knowledge, skill, and ability required to perform the work, and the complexity and difficulty of the duties and responsibilities assigned.
- (2) Level of Responsibility. This factor includes such things as independence (e.g., the degree to which work and decisions are supervised or reviewed); the extent to which guidelines for the work are available or must be developed; and the kinds of contacts required to perform the work.

Not all aspects of assignment and responsibility are discussed in the guide and users should consider and credit any aspects which are equivalent to those specifically covered. Work examples do not cover all situations, and the absence of a specific example does not preclude crediting equivalent work at that grade level.

## DETERMINATION OF CLASSIFICATION SERIES AND TITLES

Positions evaluated by this guide are to be classified in the most appropriate series in accordance with the definitions published in the Office of Personnel Management's Handbook of Occupational Groups and Series of Classes and with the discussions of coverage in individual classification standards. In particular, see the Education Group Coverage Standard, GS-1700, and the standards for appropriate subject-matter series.

In borderline cases, the key considerations in deciding the proper series for a position are (1) the nature of the primary or paramount qualification required to do the work, and (2) the normal career progression pattern for the position.

Official position titles are established by the classification standard for the series or by the general titling instructions in the Introduction to the Position Classification Standards. The

parenthetical title "(Instructor)" may be added to such titles for positions in subject-matter series.

## PART I -- INSTRUCTOR WORK

<b>Grade</b>	<b>Nature of Assignment</b>	<b>Level of Responsibility</b>
GS-5	Trainee level	Close supervision and guidance
GS-7	Developmental level or Short, repetitive courses or course units	Less supervision and guidance or Works independently in highly structured work situations
GS-9	Full range of subjects at elementary level, secondary level courses, basic undergraduate courses, or broad courses in fundamentals and skills of a technical occupation	Works independently within prescribed course framework; recommends course modification; work is reviewed for technical accuracy and adherence to established lesson plans
GS-11	Upper-division undergraduate courses, or courses in advanced technical systems; or courses comparable to GS-9 requiring significant adaptation or revision due to subject-matter or student problems	Participates substantially in course development or modification; work is reviewed for technical accuracy and consistency with course objectives and policy
GS-12	Upper-division undergraduate courses or courses in advanced technical systems requiring primary role in development of course content or Graduate level or comparable courses	Develops total course content to meet defined course objectives; may perform professorial functions; work is reviewed for consistency with course objectives and policy or Develops specific course content on basis of prescribed topics to be covered; work is generally reviewed for accomplishment of objectives and policy, but may be reviewed in more detail in critical subject areas.
GS-13	Graduate level or comparable courses in highly complex subject areas	Devises original course plan and design based on approved objectives; acts as authoritative technical expert; performs professorial functions; work is reviewed for consistency with budget resources and policy

## **GS-5 INSTRUCTOR WORK**

GS-5 is the basic trainee level for instructor work. Instructors at this level are normally receiving formal classroom instruction and/or on-the-job training. They frequently serve as assistant instructors under the guidance of a senior instructor, or conduct training sessions that cover well-established, factual topics under detailed guidelines.

Supervision received at this level is very close and guidelines are specifically prescribed and usually detailed. In the beginning, classroom sessions are audited frequently.

## **GS-7 INSTRUCTOR WORK**

GS-7 instructor work may be developmental or non-developmental.

At the developmental level, instructors are preparing for higher level responsibilities. Assignments may be similar to those at the GS-5 level, but with an increasing variety of topics assigned. Guidelines for developmental assignments are specifically prescribed, but supervisory review of work plans and audits of classroom sessions decrease as GS-7 instructors progress in their development. Other GS-7 assignments may involve conducting or assisting with courses comparable to those at the GS-9 level, but with close supervision and specific and detailed guidelines immediately available.

At the non-developmental level, GS-7 instructor assignments typically involve short, repetitive courses or course units that are highly structured. The instructor works independently. GS-7 instructors make suggestions for course modification which are primarily procedural; they may occasionally make substantive recommendations.

### **Examples**

- Course in beginning typing.
- Course in the operation, repair, and maintenance of uncomplicated equipment, such as a course in the operational use and maintenance of hand and shoulder weapons.

## **GS-9 INSTRUCTOR WORK**

### *Nature of Assignment*

Courses taught at this level cover a wide variety of topics in well-established areas of a subject-matter field. They include courses taught by a technical service school in the fundamentals and skills of a technical occupation; courses taught at the secondary through

basic undergraduate levels; or all subjects taught at an elementary school level. They require thorough familiarity with the assigned subject-matter area and use of a wide range of teaching methods or tools depending on the students' learning requirements. They are usually well structured and have ample training materials. These courses generally involve instructional problems that require organization, illustration, and interpretation of course material in order to reach and motivate students who may pose typical problems of communication and motivation, e.g., diverse ages, backgrounds, and levels of interest in the course. GS-9 instructors need to give concrete expression to the abstract principles and concepts taught at this level. They make recommendations for changes which involve substantive rather than procedural matters. Obtaining and adapting current instructional material is typical of this level.

### *Level of Responsibility*

Instructors at this level independently plan and carry out their training sessions within the prescribed course framework. They resolve normal classroom problems and make outside contacts for supplemental information and materials. On unusual matters or questions of program objectives and policy, they obtain guidance before taking action. Recommendations for course modification receive review for consistency with overall course material, for technical accuracy, and for educational adequacy. Courses of instructors at this level are audited and evaluated periodically by higher level instructors. GS-9 instructors may participate in task analyses for determining training requirements or in special staff studies of training and testing materials, for which they receive specific guidance on coverage, methodology, approaches, and sources to use.

### Examples

- Broad course in the fundamentals and basic skills of an occupation such as computer operation or engineering drafting. (Involves detailed explanation, demonstration, and supervision of laboratory exercises. Frequently requires translation of theoretical explanations and mathematical analyses into simpler explanations.)
- Course in the maintenance and repair of designed components of various models of aircraft requiring explanation of the theoretical factors underlying maintenance and repair problems and keeping up to date on changes in equipment. (Also at this level are standardized or highly structured courses in maintenance and repair of major aircraft systems for various models of aircraft.)
- Basic, well-standardized courses, up to and including the college undergraduate level, in the principles of a field, e.g., general accounting, basic management, or introductory data processing.



- Unstructured, self-paced learning program. (Instructor guides students in applying a variety of learning techniques I a variety of subject areas.)
- Secondary school course such as world history, senior mathematics, or English literature.

## **GS-11 INSTRUCTOR WORK**

### *Nature of Assignment*

Courses at this level cover advanced technical systems or subject-matter areas comparable to the upper-division undergraduate level. These courses are not in standardized or pre-structured form, and they typically have source materials problems (e.g., source materials may be excessively numerous, may be difficult to locate, or may be difficult to adapt). GS-11 instructors are responsible for overall maintenance of their assigned courses and determine the need for and initiate changes/updates in course content. They participate substantially in course development or modification. Instructors at this level frequently demonstrate techniques to trainee instructors and evaluate the performance of lower level instructors.

Some courses taught at this level are similar to those taught at the GS-9 level, but GS-11 instructors are required to adapt or revise their courses because of subject-matter or student problems. Subject-matter problems result from technological changes or new developments in the field and require frequent updating of knowledge and course content by instructors; student problems relate to students with complicated, specialized, or persistent learning difficulties requiring instructors to modify courses to meet the needs of the students.

### *Level of Responsibility*

Instructors at this level may receive course assignments with the course objectives, topics to be covered, and general content in a prescribed form, but they also typically participate in original course content development and in its subsequent modification. Within the framework of approved course objectives and topics to be covered, GS-11 instructors use such methods as they believe will be most effective. They determine the need for additional subject-matter information and may meet with representatives of outside organizations in order to obtain it. They develop or adapt new or revised training or testing materials for formal course use; these materials may be reviewed by the instructor's supervisor for technical accuracy, consistency with course objectives, educational effectiveness, and program policy.

### *Examples*

- Complete course in aircraft maintenance and repair that covers major aircraft systems (various models of aircraft) and requires an understanding of the overall relationships of the various systems and parts of the aircraft. (Instructor must be alert to design and

development changes as they occur and incorporate them into the course. Requires frequent contact with manufacturers regarding new maintenance and repair problems to be covered.)

- Complete course in advanced theoretical principles and techniques of electronics for use in diagnosing and adjusting malfunctions in complex and frequently changing electronic equipment, e.g., multipurpose test equipment, special purpose computers, or complex radar equipment. (Requires efforts similar to those discussed immediately above.)
- Course covering designated topics in management operations for an entire major mode of transportation, such as marine transportation, covering the overall theory and planning, factors to be considered in organizing the operations of a port, the availability of other transportation near the port, fire-fighting equipment, and celestial navigation. (Requires intensive knowledge of the various facets of management operations and of how they interrelate.)
- Vocational training course in fundamentals of an occupational field, with special objectives for learning disabled students. (Instructor must design or redesign much or all of the course outline, content, and training materials and aids to meet the particular needs of the student group. Requires use of special and innovative instructional techniques.)

## **GS-12 INSTRUCTOR WORK**

Instructor work at this level falls into two general categories: (1) courses in advanced technical systems, or courses at the upper-division undergraduate level, that require the instructor to take the primary role in development of course content or perform professorial functions; or (2) courses comparable to the graduate level for which supervision and guidelines are closer than for GS-12 courses described in category (1).

### *Nature of Assignment (1)*

Courses at this level that are upper-division undergraduate courses, or courses in advanced technical systems, require the instructor to take a primary role in developing specific course content for the complete course. In addition, GS-12 instructors may arrange and moderate seminars and conferences, provide guidance for students and student projects, give lectures and participate in panel discussions, and/or participate in planning and developing or evaluating and revising the curriculum for their academic department.

Courses taught at the GS-12 level require extensive factfinding and development of source information, and involve more problems in selecting, interpreting and adapting materials than at GS-11. For example, the subject-matter area may be in a new or changing field where little research has been done and source information and training materials are lacking, or the

materials are unsuitable for the particular student body; or the course may be in a well established subject-matter area which has major gaps in the available literature or unsatisfactory materials.

### *Level of Responsibility (1)*

Instructors at this level teaching upper-division undergraduate courses or courses in advanced technical systems receive defined course objectives, but independently develop the total course content. Superiors and peers rely upon the accuracy and adequacy of their course content and technical knowledge of specialty areas. They either determine or are consulted in determinations regarding course content development; this includes choice of topics, subject-matter content, organization of the course, and the emphases to be given.

The work of GS-12 instructors is reviewed for consistency with course objectives and program policies and for effectiveness in accomplishing course objectives. They may make extensive outside contacts for source information, gathering facts from various sources such as industry, research laboratories, educational institutions, professional associations, libraries, and other agencies.

Some GS-12 assignments involving undergraduate courses include professorial functions. Professorial functions at this level typically include contributing to research in the field of competence; curriculum coordination responsibilities; and representing the organization at professional and public gatherings, lectures and panel discussions

## **OR**

### *Nature of Assignment (2)*

Courses taught at the GS-12 level that are graduate level or comparable courses are similar to those taught at the GS-13 level, but the GS-12 instructor's role in course design and development is limited. These courses usually cover subject areas for which there is an abundance of source information; however, the information may be scattered, unorganized, and require supplemental research, coordination, and adaption.

### *Level of Responsibility (2)*

GS-12 instructors teaching graduate level courses are responsible for the development and adequacy of specific course content. Usually, a curriculum committee, academic department head, or a higher level instructor determines the specific topics to be covered in the course, often with the GS-12 instructor participating in the determinations. Work is reviewed for accomplishment of objectives. Course development in critical subject areas may be reviewed

for content, emphasis, clarity, proposed method and approach, and consistency with program policies.

#### Examples

- Course covering traffic management planning that cuts across several modes of transportation. (Requires knowledge of transportation approaches and an understanding of their relative advantages and limitations.)
- Course covering space technology applications. (Requires frequent modification and change to incorporate significant development of new or revised theories and techniques resulting from advances in the field.)
- Course covering problems in advanced management. (Requires understanding of diverse points of view and changing emphases regarding important aspects of the field to present a balanced treatment of the subject.)

### **GS-13 INSTRUCTOR WORK**

#### *Nature of Assignment*

At this level, instructors design, develop, revise, and conduct courses covering subject-matter areas comparable to graduate school levels. Courses are in subject areas that are unusually broad and highly complex, e.g., a course in national and international security for students at or preparing for policy-making or command levels. Frequently, courses are in newly emerging or rapidly changing areas, are highly innovative, require extensive authoritative knowledge of the specialty field, and often require interdisciplinary knowledges.

Reference sources and materials for these courses may be nonexistent or obsolete, and GS-13 instructors typically carry out course-related original research, i.e., research adding significantly to the existing knowledge of the field, or presenting a new viewpoint or a synthesis of is of previously unrelated data or ideas. Their research findings are frequently published.

#### *Level of Responsibility*

Course objectives may be proposed by the instructor or a committee and are usually subject to the approval of the training department head. Based on approved course objectives, instructors at this level devise the original plan and design for the basic concepts of their courses. They also determine the extent of their research and contacts with others.

Instructors at this level are relied upon as authoritative technical experts in their areas of competence and must assure that their courses mesh with related courses in the organization. They perform professorial functions such as coordinating curriculum development, carrying out research, coordinating student research, or participating in or chairing faculty committees. In performing these functions they provide educational leadership regarding broad academic policy requirements such as academic standards, admission standards, and advanced degree requirements. Plans proposed by GS-13 instructors are reviewed for consistency with budget resources and policy objectives. Completed work is reviewed for accomplishment of course objectives.

#### Examples

- Courses in the field of national and international security to prepare senior military and civilian officials for policy-making command and staff assignments, e.g., studies of the effect of technological and scientific developments on warfare and strategic planning. (These courses combine established academic and professional disciplines with current developments in specialized areas, drawn from various sources including military intelligence and planning documents. The instructor must continually reassess and revise the course content in the light of rapidly changing world conditions.)
- Courses in highly advanced areas of scientific, engineering, legal, medical, or comparable technical or specialized fields that are highly theoretical, abstract, and frequently controversial and/or in a continuous state of rapid growth, development, or change.

## PART II -- INSTRUCTIONAL SPECIALIST WORK

The following is a summary chart of the key grade level concepts for instructional specialist work. Criteria to be used for position classification follow the chart.

Grade	Nature of Assignment	Level of Responsibility
GS-5	Trainee level	Close supervision and guidance
GS-7	Normally developmental level	Less supervision and guidance
GS-9	Carries out studies or analyses which result in short courses or modules, portions of longer courses, or other complete training products	Works independently, using established precedents as models; work is reviewed for technical soundness and conformance with project objectives
GS-11	Develops full-length courses or performs comparable assignments such as validity and reliability studies for a category of tests and measurements	Works independently, adjusting methods and/or materials to fit situations different from those in existing guidelines; work is reviewed for technical adequacy and educational effectiveness
GS-12	Oversees broad specialty area in education and training, subject-matter field, or cluster of courses	Work is reviewed for effectiveness and consistency with educational philosophy, objectives of program, and policies of organization; work is not reviewed for technical accuracy
GS-13	Serves as authoritative consultant and troubleshooter; plans, develops, and evaluates experimental programs	Work is reviewed for accomplishment or project and program objectives, consistency with agency policies, philosophy and goals; work may radically change training content, techniques, and methods used in specific training areas
GS-14	Serves in key specialist position in central staff organization, or as top educator (generalist) in a technical service school	Generates most of own work and independently plans, organizes, and carries out studies; work has broad impact on agency/servicewide training

## **GS-5 INSTRUCTIONAL SPECIALIST WORK**

GS-5 is the basic trainee level for instructional specialist work. Training is provided through classroom instruction and on-the-job assignments. Work at this level includes tasks that are relatively uncomplicated, usually performed in an assistant capacity under the guidance of a higher grade specialist.

Supervision received at this level is close and guidelines are specifically prescribed and usually detailed. Personal work contacts are with designated sources and involve the exchange of information.

## **GS-7 INSTRUCTIONAL SPECIALIST WORK**

GS-7 is normally a developmental level for instructional specialist work. Assignments provide preparation for full performance level work, and typically involve segments or phases of projects being carried out by higher grade employees.

Supervision is less intensive than at GS-5, particularly when assignments are repetitive and governed by established and specifically applicable procedures. Assignments may require judgment in selecting specific guidelines most appropriate for the work to be done. Personal work contacts are to exchange information and may involve persons from outside the immediate organization.

## **GS-9 INSTRUCTIONAL SPECIALIST WORK**

### *Nature of Assignment*

Employees independently carry out studies or analyses in a subject-matter or functional specialty area (e.g., educational/training media, tests and measurements, publications review, course development) which are typically short and self-contained or constitute portions of larger projects. Assignments are characterized by the conventional or established nature of the educational/training product and the requirement for some adaption of existing materials or methods. Employees gather relevant information, analyze pertinent data, develop findings, and make recommendations that are largely modeled on precedents. When precedents are lacking, work at this level requires additional supervision and guidance.

### *Level of Responsibility*

Project assignments typically begin with a briefing on the project background, objectives, relationship of the assignment to other aspects of the project, and general nature of the results expected. Although work is carried out independently, the supervisor gives advice on anticipated problems and is consulted by the specialist when unexpected problems arise. Completed work

is thoroughly reviewed to see that it is technically sound and meets project objectives. Employees are expected to devise ways to accomplish their work within established guidelines, making minor adjustments in methods or modifications of materials as necessary. Using contacts which have usually been previously established, employees maintain liaison with and obtain information from instructors and instructional specialists within the organization and in other training organizations or activities.

### Examples

- Reviews and evaluates audiovisual aids for courses from a variety of sources to identify those aids that most effectively and efficiently enhance training. Makes necessary contacts with sources to obtain information on materials and costs, and with instructors and instructional specialists to obtain information on needs and suitability of classroom facilities for use of aids. Develops recommendations for selecting the most suitable aids and instructions on the timing and methods of their use.
- Develops or revises objective tests. Determines suitability for intended use, ease of administration and scoring, misleading terminology, overlapping items, items with clues to answers, and similar deficiencies. Studies course objectives, outlines, or other available training materials, or consults instructor or subject-matter specialist in developing test items. Analyzes trial administration of tests to determine reliability and presents recommendations on test items to use.
- Develops material for portions of a new course which conform to existing guidelines and precedents, or evaluates and revises a course which requires only minor modifications, such as routine periodic updating.

## **GS-11 INSTRUCTIONAL SPECIALIST WORK**

### *Nature of Assignment*

Employees produce complete, self-contained, training products (courses, aids, methods, training plans, etc.) along subject-matter or functional specialty area lines. Assignments are characterized by changing or new circumstances which affect specific situations and require adjustments in methods or approaches different from those in existing guidelines. Work involves extensive planning and organization, analyses of accumulated data and information, and considerable coordination and integration of the work with other functional activities.

At this level, instructional specialists develop complete, full-length courses comparable to those described in examples of typical course assignments of GS-9 in instructors (see Part I of this guide). This level is also appropriate for work involving the performance of comparable assignments,



such as reviewing and evaluating new audiovisual aids which affect an entire type of course, or planning and conducting validity and reliability studies to analyze test items.

### *Level of Responsibility*

Assignments may be made on a continuing or a project basis. When on a continuing basis, much of the work is the result of the employee's recognition of problems needing attention or of subjects requiring study. When assigning work on a project basis, the supervisor explains the project in general terms, with emphasis on any unusually complex or novel problems anticipated and the general nature of the results expected. The employee independently performs work which requires original development and revision of materials or methods. Completed work is usually reviewed for technical adequacy and for educational or training soundness of treatment. Employees at this level frequently establish new contacts within and outside the agency to obtain needed information, often seeking it from primary sources (e.g., direct contacts and interviews with producers or manufacturers).

### *Examples*

- Develops complete, full-length courses (or major course units of comparable scope) in an established subject field for instructor use in a technical service school. Assigned course coverage is comparable to typical course assignments of GS-9 instructors.
- Reviews and evaluates audiovisual aids of substantial scope, which are often in untried form, such as drafts of scripts of movies or closed-circuit television and radio programs. Assesses adequacy of product, need for revisions, and develops recommendations for improvement.
- Plans and conducts validity and reliability studies to analyze test items prepared by instructors. Develops recommendations for revising test items to improve their clarity and adequacy and increase the reliability and validity of the test.

## **GS-12 INSTRUCTIONAL SPECIALIST WORK**

### *Nature of Assignment*

Employees establish instructional design, development, or evaluative criteria through the analysis of educational or instructional problems or questions. Assignments may be in a functional specialty area of education and training (e.g., instructor development), in a subject-matter area (e.g., advanced electronics), or may involve a grouping of courses. Assignments sometimes cut across a variety of specialty areas in education and training for a given organization, geographic area, or program area.

Assignments are characterized by complicating factors, such as changing situations or educational developments in the field which outdated established guideline material, or the need to pull together two different but partially related fields (e.g., the field of engineering and the field of electricity/electronics), which requires the employee to have knowledge of more than one field. Employees at this level often deal with matters which are controversial, unconventional, or novel. Assignments frequently require substantial adaptations or extensions of available guides and established procedures or, in some instances, the development of new approaches, methods, or techniques for specific applications.

### *Level of Responsibility*

Assignments may be made on a project or continuing basis; or they may be self-initiated on the basis of apparent need, in which case the supervisor is consulted for approval. Employees are relied upon to perform services, develop products, and take actions that are technically sound and valid. Supervisory review of completed work is primarily to determine general effectiveness and consistency with the educational philosophy and objectives of the program and with the policies of the organization.

The products and services of work at this level affect a considerable number and variety of users (e.g., teachers in the elementary and secondary schools of a geographic area, instructors in a large technical service school that gives a wide variety of courses at various levels of complexity, or students in a large number of schools).

### Examples

- Initiates and plans development of curricula for courses in an assigned subject field, well in advance of use in formal courses of instruction in a technical service school, to encompass new or anticipated design changes in equipment or other developments in the subject field. The area of course coverage involves such complicating conditions as those described as characteristic of course assignments in instructor work of at least the GS-11 level (see Part I of this guide). Writing actual course content and development of related course materials may be assigned to field training establishments or to private contractors. In such cases, the specialist provides project guidelines, makes periodic review of progress, reviews complete project, and revises materials or returns them to originator with instructions concerning needed revisions.
- Plans and conducts studies which evaluate and predict program achievements and student performance and prepares interpretations of results and recommendations. Studies involve such significant matters as the grading system, admission policies, course prerequisites, objectives and contents, instructional methods, failure and attrition, student counseling needs,

or appropriateness of accelerated graduation based on skills acquired through civilian or military experience.

## **GS-13 INSTRUCTIONAL SPECIALIST WORK**

### *Nature of Assignment*

At this level, instructional specialists are recognized as authoritative consultants who plan and develop experimental programs, evaluate results, and use the findings in planning, developing, and installing new or modified programs. Assignments often involve program innovations or modifications which result in the need to provide training to staff who will be using the new programs or products. Troubleshooting duties frequently require providing problem-solving assistance to, and technical review and leadership over, other employees or other facets of the agency's, or major military command's, education and training organization.

Employees at this level resolve matters which are often controversial, complicated, or set general precedent; involve coordinating or negotiating matters of considerable consequence; or affect prominent and fundamental policy issues in the subject-matter field. Assignments typically require the development and application of new program methods, approaches, and technology. The employee's conclusions, recommendations, or determinations may result in setting official policy or obligating substantial program resources.

### *Level of Responsibility*

Specialists at this level typically ascertain the need for and generate surveys and studies. Supervisory review of initial plans is primarily to assess priorities, the feasibility of program and project proposals, and the availability of budget and other resources. Employees independently carry projects through to their conclusion. Completed work products are relied upon for soundness, accuracy, and adequacy of technical detail, and are normally not reviewed for such purposes. Review of work performance at this level is primarily for accomplishment of project and program objectives; for consistency with agency, or major military command, policies, philosophy, and goals; and for the quality of contributions to education and training programs.

To stay abreast of developments within their specialty area, GS-13 specialists establish and maintain professional contacts with leading practitioners, researchers, and others in education and training institutions, research organizations, and industry. Work projects typically have a significant impact on a broad segment of the staff and student body in the education and training program which is evident throughout the agency or major military command. Products may radically change the training content or the education and training techniques and methods used in the teaching of certain subjects to specific segments of the student population.

### *Examples*

- Serves as an organization's primary education specialist in an expanding area of training methodology. For example, serving as (1) consultant and troubleshooter in a major service school or at an agency or major military command headquarters level on the most difficult training and developmental design problems, or (2) the primary officer or team leader on special project studies covering difficult course design problems. Develops methods of using new training media in designing courses and special course materials in areas where new designs for presenting the materials are needed. Evaluates the effectiveness of learning via new media. As needed, develops and conducts special pilot instructor workshops to assure clear understanding of course design characteristics and rationale.
- Serves as chief education specialist for a regional area involving several education and training centers that provide highly individualized programs of basic and general education and vocational training. Oversees, coordinates, and evaluates overall educational program activities of the various centers in their implementation of basic national guidelines. Makes recommendations to headquarters regarding new requirements and need for changes in existing standards and guidelines, which are given great weight by the agency.
- Provides advice and guidance throughout a major military command. Has continuing responsibility for training aids and devices in a broad subject area (e.g., torpedoes and missiles systems) to aid in teaching the full range of skills, theory, equipment operation, tactics, and team work associated with the assigned subject area. Applies a comprehensive training approach to situations needing devices that are technologically complex.

## **GS-14 INSTRUCTIONAL SPECIALIST WORK**

### *Nature of Assignment*

Instructional specialists at this level typically provide leadership, advice, and guidance throughout their organizations and serve in key staff positions, such as a specialist at agency or major military command headquarters, or in a generalist capacity as top educator in a technical service school. They anticipate changes or new developments in the technology or in the educational field affecting their specialty areas and program operations. They develop advance plans to insure timely introduction of new or revised procedures, techniques, or operational concepts into the training program. They conceive, develop, and introduce new program objectives, goals, systems, and concepts. They propose new performance standards and evaluate ways and means of obtaining objectives. They design evaluation and quality control means to measure the effectiveness of program concepts or techniques. They use these means to determine if progress is being made toward attainment of program objectives and the necessity for program expansion, contraction, or revision, in view of current and anticipated needs.

### *Level of Responsibility*

Instructional specialists at this level generate most of their own work and independently plan, organize, and carry out their studies. Their plans and proposals for major changes and/or new projects and programs are reviewed for priority, budget limitations, and for consistency with the broad objectives and policies of the organization. Review of their completed work is to assess degree of success in accomplishing objectives. The work has broad impact on a large number of education and training staff and students, usually in a servicewide technical training program or in an agency's or major military command's entire education and training program.

### Examples

- Serves in a central staff organization of one of the military departments, in a program that develops and provides education and training for that military service. On a servicewide basis, serves as the program's key education specialist in instructional technology, covering the specialty areas of curriculum design, instructional systems, and instructor training. Establishes the basic requirements and guidelines for these areas. Products are required to be applied, on a servicewide scale, by course designers, course writers, and instructors in a wide range and variety of technical training programs developed and carried out by the military training schools of that service.
- Serves as top education adviser to the commanding officer and staff of a major technical service school or staff college. Provides advice in formulating the broad educational policies of the school, in establishing guidelines for curriculum planning, and in reviewing plans and instructional programs to assure fulfillment of the school's mission. Develops proposals to improve the quality of education and training and to keep the program current. Encourages and promotes experimental and pilot program activities to test new approaches in the instructional systems.